

No.

200400226



# THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

*Pro Seeds Marketing, Inc.*

Whereas, THERE HAS BEEN PRESENTED TO THE

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED DISTINCT VARIETY OF SEXUALLY REPRODUCED, OR TUBER PROPAGATED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF TWENTY YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, OR PROPAGATING IT, OR EXPORTING IT, OR CONDITIONING IT FOR PROPAGATION, OR STOCKING IT FOR ANY OF THE FOREGOING PURPOSES, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT VARIETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT. (84 STAT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

FESCUE, TALL

'Five Point'

*In Testimony Whereof, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington, D.C. this twenty-ninth day of November, in the year two thousand and seven.*

Attest:

Commissioner  
Plant Variety Protection Office  
Agricultural Marketing Service

Secretary of Agriculture

REPRODUCE LOCALLY. Include form number and date on all reproductions.

Form Approved OMB No. 0561-0055

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY - PLANT VARIETY PROTECTION OFFICEAPPLICATION FOR PLANT VARIETY PROTECTION CERTIFICATE  
(Instructions and information collection burden statement on reverse)

The following statements are made in accordance with the Privacy Act of 1974 (5 U.S.C. 552a) and the Paperwork Reduction Act (PRA) of 1995.

An application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). Information is held confidential until certificate is issued (7 U.S.C. 2428).

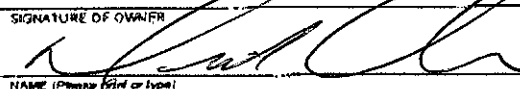

1. NAME OF OWNER <b>ProSeeds Marketing, Inc.</b> (Est. 12/19/2006)		2. TEMPORARY DESIGNATION OR EXPERIMENTAL NAME <b>MCN</b>		3. VARIETY NAME <b>Five Point</b>	
4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code, and Country) <b>13963 Westside Lane S. Jefferson, OR 97352</b>		5. TELEPHONE (include area code) <b>(541) 928-9999</b>		FOR OFFICIAL USE ONLY PVPO NUMBER <b>200400226</b> FILING DATE <b>May 14, 2004</b>	
		6. FAX (include area code) <b>(541) 924-5695</b>			
7. IF THE OWNER NAMED IS NOT A "PERSON", GIVE FORM OF ORGANIZATION (corporation, partnership, association, etc.) <b>corporation</b>		8. IF INCORPORATED, GIVE STATE OF INCORPORATION <b>OR</b>		9. DATE OF INCORPORATION <b>May 16, 1990</b>	
10. NAME AND ADDRESS OF OWNER REPRESENTATIVE(S) TO SERVE IN THIS APPLICATION. (First party in named will receive all papers) <b>V.G. Lehman 811 Mountain River Dr. Lebanon, OR 97355</b>				FILING AND EXAMINATION FEES: \$ <b>3652-</b> DATE <b>5/14/2004</b> CERTIFICATION FEE: \$ <b>768.00</b> DATE <b>10/19/2007</b>	

11. TELEPHONE (include area code) <b>(541) 451-1847</b>		12. FAX (include area code) <b>(541) 451-1847</b>		13. E-MAIL <b>vlehman@aol.com</b>	
14. CROP KIND (Common Name) <b>wild fescue</b>		16. FAMILY NAME (Botanical) <b>Graminac</b>		18. DOES THE VARIETY CONTAIN ANY TRANSGENES? (OPTIONAL) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF SO, PLEASE GIVE THE ASSIGNED USDA APHIS REFERENCE NUMBER FOR THE APPROVED PETITION TO DEREGULATE THE GENETICALLY MODIFIED PLANT FOR COMMERCIALIZATION.	
15. GENUS AND SPECIES NAME OF CROP <b>Festuca arundinacea</b>		17. IS THE VARIETY A FIRST GENERATION HYBRID? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		20. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE SOLD AS A CLASS OF CERTIFIED SEED? (See Section 83(a) of the Plant Variety Protection Act) <input type="checkbox"/> YES (if "yes", answer items 21 and 22 below) <input checked="" type="checkbox"/> NO (if "no", go to item 23)	
23. CHECK APPROPRIATE BOX FOR EACH ATTACHMENT SUBMITTED (Follow instructions on reverse) a. <input checked="" type="checkbox"/> Exhibit A. Origin and Breeding History of the Variety b. <input checked="" type="checkbox"/> Exhibit B. Statement of Distinctness c. <input checked="" type="checkbox"/> Exhibit C. Objective Description of Variety d. <input checked="" type="checkbox"/> Exhibit D. Additional Description of the Variety (Optional) e. <input checked="" type="checkbox"/> Exhibit E. Statement of the Basis of the Owner's Ownership f. <input checked="" type="checkbox"/> Voucher Samples (2,500 viable untreated seeds of, for tuber propagated varieties, verification that tissue culture will be deposited and maintained in an approved public repository) g. <input checked="" type="checkbox"/> Filing and Examination Fee (\$3,852), made payable to "Treasurer of the United States" (Mail to the Plant Variety Protection Office)		21. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF CLASSES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, WHICH CLASSES? <input type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED		22. DOES THE OWNER SPECIFY THAT SEED OF THIS VARIETY BE LIMITED AS TO NUMBER OF GENERATIONS? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO IF YES, SPECIFY THE NUMBER 1,2,3, etc. FOR EACH CLASS <input checked="" type="checkbox"/> FOUNDATION <input type="checkbox"/> REGISTERED <input checked="" type="checkbox"/> CERTIFIED (If additional explanation is necessary, please use the space indicated on the reverse.)	
25. HAS THE VARIETY (INCLUDING ANY HARVESTED MATERIAL) OR A HYBRID PRODUCED FROM THIS VARIETY BEEN SOLD, DISPOSED OF, TRANSFERRED, OR USED IN THE U. S. OR OTHER COUNTRIES? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO (Est. 9/2004/12) IF YES, YOU MUST PROVIDE THE DATE OF FIRST SALE, DISPOSITION, TRANSFER, OR USE FOR EACH COUNTRY AND THE CIRCUMSTANCES. (Please use space indicated on reverse.)		24. IS THE VARIETY OR ANY COMPONENT OF THE VARIETY PROTECTED BY INTELLECTUAL PROPERTY RIGHT (PLANT BREEDER'S RIGHT OR PATENT)? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PLEASE GIVE COUNTRY, DATE OF FILING OR ISSUANCE AND ASSIGNED REFERENCE NUMBER. (Please use space indicated on reverse.)			

25. The owners declare that a viable sample of basic seed of the variety has been furnished with application and will be replenished upon request in accordance with such regulations as may be applicable, or for a tuber propagated variety a tissue culture will be deposited in a public repository and maintained for the duration of the certificate.

The undersigned owner(s) is(are) the owner of this sexually reproduced or tuber propagated plant variety, and believe(s) that the variety is new, distinct, uniform, and stable as required in Section 42, and is entitled to protection under the provisions of Section 42 of the Plant Variety Protection Act.

Owner(s) is (are) informed that false representation herein can jeopardize protection and result in penalties.

SIGNATURE OF OWNER 		SIGNATURE OF OWNER 	
NAME (Please print or type) <b>Dick Olson</b>		NAME (Please print or type) <b>Dick Olson</b>	
CAPACITY OR TITLE <b>Pres</b>	DATE <b>1-16-04</b>	CAPACITY OR TITLE	DATE

(See reverse for instructions and information collection burden statement)

## INSTRUCTIONS

**GENERAL:** To be effectively filed with the Plant Variety Protection Office (PVPO), ALL of the following items must be received in the PVPO: (1) completed application form signed by the owner; (2) completed exhibits A, B, C, E; (3) for a seed reproduced variety at least 2,500 viable untreated seeds, for a hybrid variety at least 2,500 untreated seeds of each line necessary to reproduce the variety, or for tuber reproduced varieties verification that a viable (in the sense that it will reproduce an entire plant) tissue culture will be deposited and maintained in an approved public repository; (4) check drawn on a U.S. bank for \$3,652 (\$432 filing fee and \$3,220 examination fee), payable to "Treasurer of the United States" (See Section 97.6 of the Regulations and Rules of Practice.) Partial applications will be held in the PVPO for not more than 90 days, then returned to the applicant as unfilled. Mail application and other requirements to Plant Variety Protection Office, AMS, USDA, Room 401, NAL Building, 10301 Baltimore Avenue, Beltsville, MD 20705-2351. Retain one copy for your files. All items on the face of the application are self explanatory unless noted below. Corrections on the application form and exhibits must be initialed and dated. **DO NOT** use masking materials to make corrections. If a certificate is allowed, you will be requested to send a check payable to "Treasurer of the United States" in the amount of \$432 for issuance of the certificate. Certificates will be issued to owner, not licensee or agent.

Plant Variety Protection Office

Telephone: (301) 504-5518

FAX: (301) 504-5291

Homepage: <http://www.ams.usda.gov/science/pvpo/pvp.htm>

To avoid conflict with other variety names in use, the applicant must check the appropriate recognized authority and provide evidence that name has been cleared by the appropriate recognized authority before the Certificate of Protection is issued. For example, for agricultural and vegetable crops, contact: Seed Branch, AMS, USDA, 10301 Baltimore Avenue, Suite 401 NAL Building, Beltsville, MD 20705. Telephone: (301) 504-5682 <http://www.ams.usda.gov/lsg/seed.htm>.

## ITEM

- 19a. Give: (1) the genealogy, including public and commercial varieties, lines, or clones used, and the breeding method;  
(2) the details of subsequent stages of selection and multiplication;  
(3) evidence of uniformity and stability; and  
(4) the type and frequency of variants during reproduction and multiplication and state how these variants may be identified
- 19b. Give a summary of the variety's distinctness. Clearly state how this application variety may be distinguished from all other varieties in the same crop. If the new variety is most similar to one variety or a group of related varieties:  
(1) identify these varieties and state all differences objectively;  
(2) attach statistical data for characters expressed numerically and demonstrate that these are clear differences; and  
(3) submit, if helpful, seed and plant specimens or photographs (prints) of seed and plant comparisons which clearly indicate distinctness.
- 19c. Exhibit C forms are available from the PVPO Office for most crops; specify crop kind. Fill in Exhibit C (Objective Description of Variety) form as completely as possible to describe your variety.
- 19d. Optional additional characteristics and/or photographs. Describe any additional characteristics that cannot be accurately conveyed in Exhibit C. Use comparative varieties as is necessary to reveal more accurately the characteristics that are difficult to describe, such as plant habit, plant color, disease resistance, etc.
- 19e. Section 52(5) of the Act requires applicants to furnish a statement of the basis of the applicant's ownership. An Exhibit E form is available from the PVPO.
20. If "Yes" is specified (*seed of this variety be sold by variety name only, as a class of certified seed*), the applicant **MAY NOT** reverse this affirmative decision after the variety has been sold and so labeled, the decision published, or the certificate issued. However, if "No" has been specified, the applicant may change the choice. (See *Regulations and Rules of Practice, Section 97.103*).
23. See Sections 41, 42, and 43 of the Act and Section 97.5 of the regulations for eligibility requirements.
24. See Section 55 of the Act for instructions on claiming the benefit of an earlier filing date.

**22. CONTINUED FROM FRONT** (Please provide a statement as to the limitation and sequence of generations that may be certified.)

**23. CONTINUED FROM FRONT** (Please provide the date of first sale, disposition, transfer, or use for each country and the circumstances, if the variety (including any harvested material) or a hybrid produced from this variety has been sold, disposed of, transferred, or used in the U.S. or other countries.)

Date of 1st sale = 29 Sept 2003

**24. CONTINUED FROM FRONT** (Please give the country, date of filing or issuance, and assigned reference number, if the variety or any component of the variety is protected by intellectual property right (Plant Breeder's Right or Patent).)

**NOTES:** It is the responsibility of the applicant/owner to keep the PVPO informed of any changes of address or change of ownership or assignment or owner's representative during the life of the application/certificate. The fees for filing a change of address; owner's representative; ownership or assignment; or any modification of owner's name is specified in Section 97.175 of the regulations. (See Section 101 of the Act, and Sections 97.130, 97.131, 97.175(h) of the Regulations and Rules of Practice.)

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 1.4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

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To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 328-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

## Origin and Breeding History of MCN Tall Fescue

MCN tall fescue (*Festuca arundinacea* Schreb.) is a medium low-growing, dark green, medium-fine-leaved, turf-type tall fescue selected from the maternal progenies of 110 clones. Forty percent of the parental germplasm contained the *Neotyphodium* endophyte.

The maternal germplasm of MCN traces to fourteen different sources. Fifteen percent trace to several plants selected from or related to Barlexas. Approximately twelve percent trace to several plants selected from or related to Gazelle tall fescue. Another twelve percent trace to a few plants selected from a farm in eastern North Carolina, in 1975. Twelve percent trace to plants selected from or related SR 8400. Ten percent trace to several plants selected from Lexington, KY in 1979. Eight percent trace to several plants selected from or related to Rebel 3D. Six percent trace to plants selected from or related to Arid tall fescue. Another six percent trace to several plants selected from the grounds near the GA state hospital, in 1977. Five percent trace to plants selected from or related to Apache tall fescue. Another five percent trace to plants selected from or related to Amigo. Another five percent trace to several plants selected from Atlanta, GA near GA Tech. Four percent of the germplasm traces to several plants collected from the University of Georgia, Athens, GA in 1977. One percent traces to several plants selected from Bayone Park in Bayone, NJ in 1975. Another one percent traces to a plant used in an inter-specific crossing program with perennial ryegrass.

The parental germplasm of MCN tall fescue traces its origin to plants selected from old turfs of the United States in a germplasm collection program initiated in 1962, to plants selected from or related to Rebel tall fescue (Funk et al., 1981). Attractive clones were selected from old turfs in Birmingham, AL; Athens, Atlanta, and Milledgeville, GA; Preston, ID; Baltimore, MD; Bayonne, Jersey City, Elizabeth, Princeton, and Cape May, NJ; eastern North Carolina; Philadelphia, PA; Nashville, TN;

Lexington, KY; Cincinnati, OH; Dallas, TX; and northern Mississippi. The tall fescue plants selected from old turfs were of unknown origin. All were large patches of turf surviving in stressful environments indicating that they had persisted and developed over a period of many years.

A few hundred attractive, turf-type plants were collected and established in spaced-plant nurseries and/or frequently mowed clonal evaluation trials at Rutgers University. All but a few dozen of the most promising plants were quickly discarded. The best selections were very different from any tall fescue variety in existence at the time of collection. They produced lower-growing turfs with finer leaves, greater density, darker color, and greater tolerance of close mowing.

The most promising plants were identified by their persistence and appearance in old turfs and their performance in spaced-plant nurseries, mowed clonal evaluation tests, and single-plant progeny trials under turf maintenance. Intercrosses of the best performing plants were subjected to varying cycles of phenotypic and genotypic selection depending on their date of collection. New sources of germplasm were added to the breeding program as it became available from the continuing collection program. Each cycle of selection showed continued progress in producing lower-growing, darker green, attractive plants with improved turf performance scores. Selection was also effective in maintaining high seed yields, and good stress tolerance. Substantial progress was made in developing tall fescues with finer leaves, a lower growth profile, increased persistence under close mowing, and increased density.

Large numbers of single-plant progenies were seeded in turf evaluation trials at the Plant Science Research Farm at Adelphia, NJ in 1991, and 1993. An additional test was established at the Rutgers turfgrass research facility in North Brunswick, NJ in 1992. Following a period of summer stress due to heat, drought and disease in 1994, plants were selected from the best performing single-plant progeny turf plots and established two nurseries in the spring of 1994. One contained the best performing turf plots from

the 1992 tall fescue test at North Brunswick, and the 1991 test at Adelphia, totaling 4,620 plants. These were selected from 1,060 single-plot progeny turf plots from 17 populations from the 1992 tall fescue tests at North Brunswick and 1,025 single-plant progeny plots from the 1991 tall fescue test at Adelphia, New Jersey. The second nursery contained 1,428 plants from the best performing turf plots from the 1993 tall fescue test at Adelphia, NJ. These were chosen from 960 plots in the 1993 trial. Selection of progenies was based on performance records as well as appearance at the time the plants were selected from these progeny plots. Selection of plants from each progeny was based on an attractive dark green color, medium-fine leaves, abundant tillering, and freedom from disease.

In the spring of 1996, 127 plants were selected from those two-year old nurseries for characteristics such as medium maturity, dark green color, intermediate shoot density, semi-dwarf growth habit, freedom from disease and high seed yield potential and moved, prior to anthesis, to an isolated crossing block at Adelphia. One hundred and ten plants from 63 different lines were harvested from the crossing block for high seed yield, excellent floret fertility and freedom from disease. In the fall of 1996, one turf plot of each line was established at Adelphia and 1 gram of seed from each plant was sent to Lofts Seed, Inc., for increase and further nursery evaluation. Lofts were subsequently bought by Agribiotech Inc.. Proseeds Marketing, Inc. purchased this variety from the ABT auction in July, 2001.

MCN tall fescue has remained a stable and uniform variety for three generations and over six years. Any variants within the variety would be slightly taller and of a lighter green leaf color, and there are less than five percent of these variants.

#### References

1. Buckner, Robert C., Jerrell B. Powell, and Rod V. Frakes. 1979. Historical Development, in Buckner, Robert C., and Lowell P. Bush (editors) Tall Fescue.

Agronomy Monograph 20. American Society of Agronomy, Crop Science Society of America, Soil Science Society of America, Inc., Publishers. Madison, Wisconsin pages 1-8.

2. Funk, C.R., R.E. Engel, W.K. Dickson, and R.H. Hurley. 1981. Registration of Rebel tall fescue. Crop Sci. 21:632.

## Diagram of Origin and Breeding History of MCN Tall Fescue

## 1. 1962 to 1994

Germplasm collection, evaluation, and genetic improvement.

## 2. 1991 to 1993

Planted single-plant progenies of plants selected from current cycles of population improvement programs in closely mowed turf trials at Adelphia and North Brunswick, NJ.

## 3. 1994

Selected 6,048 plants to establish two spaced-plant nurseries in the spring of 1994 at Adelphia, NJ from the best performing single-plant progeny turf plots planted in 1991, 1992 and 1993.

## 4. 1996

Moved 127 plants with medium maturity, dark green color, intermediate shoot density, semi-dwarf growth habit, freedom from disease and high seed yield potential to an isolated crossing block. <sup>One</sup> hundred and ten plants were harvested from the crossing block with excellent appearance and floret fertility. (Pl: 9/7/2004)



**Exhibit B. Statement of distinctness**

Five point is distinct from all other tall fescue varieties by a combination of turf and morphological measurements. Five point is most similar to Rebel Jr. Five point has a flag leaf length that is shorter than Rebel Jr. (Tables 1-2, Exhibit. D). In addition, Five Point has an erect panicle habit, whereas Rebel Jr. has a nodding panicle type.

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Agriculture, Clearance Officer, OIRM, AG Box 7630, Jamie L. Whitten Building, Washington, D.C. 20250. When replying, refer to OMB No. 0581-0055 and form number in your letter. Under the PRA of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

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**U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICE  
SCIENCE AND TECHNOLOGY PROGRAM  
PLANT VARIETY PROTECTION OFFICE  
BELTSVILLE, MD 20705**

**EXHIBIT C  
(TALL & MEADOW FESCUES)**

**OBJECTIVE DESCRIPTION OF VARIETY  
TALL & MEADOW FESCUES  
(*Festuca* spp.)**

NAME OF APPLICANT(S)	TEMPORARY DESIGNATION	VARIETY NAME
ProSeeds Marketing, Inc.	MCN	Five Point

ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP Code)	FOR OFFICIAL USE ONLY PVPO NUMBER
13963 Westside Lane S. Jefferson, OR 97352	

**#200400226**

(8/10/2007)

Place the appropriate number that describes the varietal characteristics of this variety in the boxes below. Use leading zeroes when necessary (e.g. 089). Characteristics described, including numerical measurements, should represent those that are typical for the variety. Measured data should be for SPACED PLANTS. Royal Horticultural Society or any recognized color fan may be used to determine plant colors. Characteristics marked with an asterisk \* are characteristics which should be recorded.

\* 1. SPECIES: (With comparison varieties, use varieties within the species of the application variety)

\_\_\_ 1 \_\_\_ 1 = *F. arundinacea* (Tall)

**Turf Types**

1 = Kentucky 31	2 = Rebel	3 = Olympic	4 = Bonanza	5 = Arid	6 = Rebel II
7 = Shortstop	8 = Silverado	9 = Rebel Jr.	10 = Mini Mustang	11 = Crewcut	12 = Bonsai

**Forage Types**

20 = Kentucky 31	21 = Martin	22 = Forager	23 = Mozark
24 = Kenhy	25 = AU Triumph	26 = Fawn	27 = Cajun

\_\_\_ 2 \_\_\_ 2 = *F. pratensis* (Meadow)

30 = Admira	31 = Beaumont	32 = Comtessa	33 = Ensign	34 = Trader
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\* 2. CYTOLOGY:

\_\_\_\_\_ Chromosome Number

3. ADAPTATION: (0 = Not Tested; 1 = Not Adapted; 2 = Adapted)

\_\_\_ 2 \_\_\_ Transition Zone    \_\_\_ 2 \_\_\_ West    \_\_\_ 2 \_\_\_ Northeast    \_\_\_ Other (Specify): \_\_\_\_\_

\* 4. MATURITY: (Date First Headed, 10% of Panicle Emergence)

\_\_\_ 7 \_\_\_ Maturity Class    1 = Very early ( )    2 = AU Triumph    3 = Early (Fawn)    4 = K31, Kenhy    5 = Medium (Rebel)

4. MATURITY: (continued)

6 = Bonanza

7 = Late (Silverado)

8 = ( )

9 = Very late

#200400226

Date Headed 1 May 2003

Location Lebanon, OR;

(Note: comparison variety ID's refer to the numbers listed under Turf types, p. 1; example variety 8=Silverado)

<u>    </u> Days earlier than <u>    </u>	} Comparison Variety
Maturity same as <u>  8  </u>	
<u>13</u> Days later than <u>  1  </u>	

\* 5. MATURE PLANT HEIGHT CM: (Average of 100 culms from crown to top of panicle, if panicle is nodding, straighten) \* INTERNODE LENGTH CM: (First internode subtending the flag leaf)

90.2 cm Height

18.5 cm Internode Length

<u>19</u> cm Shorter than <u>  6  </u>	} Comparison Variety
Height same as <u>    </u>	
<u>    </u> cm Taller than <u>    </u>	

<u>    </u> cm Shorter than <u>    </u>	} Comparison Variety
Length same as <u>11</u>	
<u>    </u> cm Longer than <u>    </u>	

\* HEIGHT AT EAR EMERGENCE CM: (Flag leaf height from crown to flag leaf collar)

53.5 cm Height

<u>    </u> cm Shorter than <u>    </u>	} Comparison Variety
Height same as <u>11</u>	
<u>    </u> cm Taller than <u>    </u>	

\* 6. GROWTH HABIT: (Mature Plants)

  9   1 = Prostrate ( )

3 = Semiprostrate ( )

5 = Horizontal ( )

7 = Semierect (Rebel)

9 = Erect (Mini Mustang)

\* 7. RHIZOMES (Pseudo):

     mm Length

  1   1 = Absent ( )

2 = Rare (Rebel)

3 = Common ( )

\* 8. LEAF BLADE: (Tiller leaves/ turf color)

\*   7   Color: 1 = Light green ( )

3 = Medium light green ( )

5 = Green ( )

7 = Medium dark green ( )

9 = Very dark green ( )

  7   = Rebel Jr

Specify rating of comparison variety

\*   1   Anthocyanin: 1 = Absent ( )

9 = Present ( )

\*   1   Basal Hairs: 1 = Absent ( )

9 = Present ( )

\*   9   Margins: 1 = Smooth ( )

5 = Semi-rough ( )

9 = Rough ( )

8. LEAF BLADE: (continued)

\* 7 Width Class: 1 = Very coarse ( ) 3 = Coarse ( ) 5 = Medium (#200400226)

7 = Fine ( ) 9 = Very Fine ( )

\* TILLER LEAF LENGTH CM: (First leaf subtending the flag leaf)

\* TILLER LEAF WIDTH MM:

23.8 cm Tiller Leaf Length

5.9 mm Tiller Leaf Width

3.5 cm Shorter than Terradyne

0.9 mm Narrower than 6

Length same as

Width same as

cm Taller than

mm Longer than

Comparison Variety

Comparison Variety

FLAG LEAF LENGTH CM:

FLAG LEAF WIDTH MM:

12.0 cm Flag Leaf Length

(avg. 2 years)

4.95 mm Flag Leaf Width

(avg. 2 years)

3.1 cm Shorter than 2

0.6 mm Narrower than 6

Length same as

Width same as

cm Longer than

mm Wider than

Comparison Variety

Comparison Variety

\* 9. LEAF SHEATH: (Basal Portion)

\* Anthocyanin (seedling):

1 = Absent (K31)

9 = Present ( )

\* 9 Auricle Hairiness:

1 = Absent ( )

9 = Present ( )

\* 10. PANICLE: (At seed maturity except where noted.)

\* 5 Shape:

1 = Narrow-tapering ( )

95% ovate; 5% narrow tapering

5 = Ovate ( )

7 = Oblong ( )

9 = Other (specify)

\* 7 Type:

1 = Compact (appressed)

84% open; 16% intermediate

5 = Intermediate ( )

7 = Open ( )

9 = Other (specify)

\* 9 Orientation:

1 = Nodding ( )

9 = Erect ( )

90% erect; 10% semi-erect

\* 9 Branch Pubescence:

1 = Glabrous ( )

9 = Pubescent ( )

\* 6 Anther Color (At anthesis):

1 = Yellowish Green

2 = Green

3 = Bluish Green

4 = Purplish

5 = Reddish

6 = Other (Specify) 6 = yellow

\* 5 Glume Color (At anthesis):

1 = Yellowish Green

2 = Green

3 = Bluish Green

4 = Purplish

5 = Reddish

6 = Other (Specify)

\* 19.5 cm Panicle Length (from base to tip, if nodding, straighten; after anthesis)

6.8 cm Shorter than

4

Length same as

cm Longer than

Comparison Variety

\* 11. SEED: (With Lemma & Pelea)

\* 2.3906 g per 1000 seeds

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\_\_\_\_ mg Less than    \_\_\_\_  
                                  Weight same as    \_\_\_\_  
 \_\_\_\_ mg More than    \_\_\_\_

} Comparison Variety

**PALEA:** (Keels or Margins)

  1   Hairs:      1 = Absent ( )              5 = Short (Missouri 96)              9 = Long ( )

**LEMMA:**

1 Hairs: 1 = Absent (Kenhy) 5 = Several ( ) 9 = Many (Missouri 96)

6.32 mm Lemma Length (Mature)

1.43 mm Lemma Width

0.12 mm Shorter than 9

mm Narrower than

Length same as \_\_\_\_\_  
 \_\_\_\_ mm Longer than \_\_\_\_\_ } Comparison Variety

Width same as \_\_\_\_\_ } Comparison Variety  
 \_0.13\_ mm Wider than \_12\_ }

\*AWNS:   1   AWNS: 1 = Absent ( ) 9 = Present (Falcon) 0 % Plants with awns

\_\_\_\_ mm Awn length (Of those present.)

___ mm Shorter than	___	} Comparison Variety
Length same as	___	
___ mm Longer than	___	

## 12. DISEASE, INSECT, AND NEMATODE REACTION: (0= Not Tested 1= Least Resistant 9= Most Resistant)

0 Melting-out *Drechslera poae*0 Blind Seed *Gloeotinia temulenta*0 Leaf Spot *D. siccans*

0 Dollar Spot *Lanzia*, *Mollerdiscus* spp.

0 Net Blotch *D. dictyoides*

#### 4. Stem Rust *Puccinia graminis*

6 Brown Patch *Rhizoctonia solani*

0 T. Blight *Typhula incarnata*

0 C. Leaf Spot *Cercospora fectuceae*

0 Pythium Blight *Pythium* spp.

0 Pink Snow Mold *Gerlachia nivalis*

0 Powdery Mildew *Erysiphe graminis*

0 Silver Top *F. tricinatum*, *F. roseum*

0 Crown Rust *Puccinia coronata*

Other Disease \_\_\_\_\_

Other Insect \_\_\_\_\_

Other Nematode

### 13. ENVIRONMENTAL STRESS

4 Drought Stress      1 = Susceptible ( )      5 = Tolerant ( )      9 = Resistant ( )      other: DLSD=6

  0   Shade Stress      1 = Susceptible ( )      5 = Tolerant ( ) 9 = Resistant ( ) 0 = not tested

\_6\_ Winter Stress 1 = Susceptible ( ) 5 = Tolerant ( ) 9 = Resistant ( )

14. GIVE VARIETY OR VARIETIES THAT MOST CLOSELY RESEMBLE THE APPLICATION VARIETY. For the following characteristics, indicate the degree of resemblance with the following scale:

1 = Application variety is less than comparison variety 2 = Same as 3 = More than, better, greater, darker, etc.

Character	VarietiesRating	Character	VarietiesRating
Leaf Width	1, less than Rebel Sentry	Leaf Color	3, darker than Barlexas
Panicle Color		Panicle Shape	
Seed Size		Cold Injury	
Winter Color	3, better than Wolfpack	Heat	
Disease	3, more than Pure Gold, Pink Patch		

\* 15. EXPERIMENTAL: Give a brief summary of the experimental design utilized to collect the data used on this form. Cultural conditions, number of plants measured and plant spacing must be specified.

Randomized complete block, 3 replications, 20 spaced plants per replication were planted on 3 foot centers, minimum of 15 were to be measured; Cultural conditions were standard for seed production in the Pacific Northwest, with planting in the Fall and measured the following spring.



Table 2. Plant characters, two year old plants, tall fescue, Lebanon, OR, measured 2003.										
	Plant	Panicle	Internode	Height at	Flag	Flag	Tiller	Tiller	Date	Date
Variety	Height	length	length	ear	Length	Width	Length	Width	heading	anthesis
	cm	cm	cm	cm	cm	mm	cm	cm	calendar date	calendar date
MCN	96.6	22.6	18.5	53.5	14.5	5.1	23.8	5.9	4/30	5/28
R4-D	108.5	25.0	18.9	55.9	18.4	6.4	25.7	6.8	5/2	5/29
Rebel 3D	114.6	26.9	18.9	61.4	17.8	6.6	27.7	7.1	4/28	5/27
Rebel II	120.3	26.3	21.6	63.7	17.9	6.0	28.5	6.8	4/29	5/28
Bonanza	116.2	26.6	20.0	60.8	18.4	5.7	29.2	6.8	5/2	5/30
Rebel Jr	95.8	24.1	17.5	55.4	17.7	6.4	26.3	7.2	5/1	5/29
Crewcut	113.8	21.5	18.6	53.1	14.4	5.0	22.7	6.0	4/30	5/30
Silverado	95.8	22.9	16.7	51.0	16.3	5.3	24.0	5.8	4/30	5/29
MiniMustang	103.5	23.9	17.5	54.6	17.8	5.5	24.4	5.9	4/30	5/29
Ky31	134.1	29.1	22.1	73.5	18.0	6.4	29.6	7.9	4/17	5/24
Bonsai	97.2	19.3	18.8	51.8	11.6	4.6	18.7	5.3	5/4	5/31
Shortstop	105.6	22.7	17.9	52.6	17.5	5.7	24.6	6.4	5/3	5/30
5301	92.3	21.4	16.4	48.4	14.6	4.9	23.7	6.0	5/2	5/27
Rebel Sentry	97.0	22.6	16.1	49.1	15.2	5.4	21.8	6.2	4/30	5/28
Shelby	96.7	22.5	16.5	45.8	14.2	5.5	21.0	6.0	5/1	5/28
Rebel Pro	92.8	22.5	17.4	51.6	13.6	4.9	21.6	5.8	4/28	5/28
Rebel IV	95.9	20.4	18.1	51.0	14.5	5.4	22.7	5.9	5/1	5/28
Terradyne	91.2	19.5	16.8	46.5	12.8	4.8	19.5	5.4	5/2	5/29
Rebel III	114.0	27.0	19.5	56.8	19.1	6.4	28.0	6.8	4/28	5/29
LSD (P=0.05)	10.9	2.6	2.9	7.7	2.7	0.7	3.1	0.7	3.6	1.6



Table 3. Quality of selected tall fescues from NTEP, NJ1 and NC1 locations, 2002 data.						
Variety		NJ1	NC1			
		Quality	Quality			
MCN		5.50	6.60			
Rebel Sentry		5.10	6.60			
Rebel IV		6.80	6.60			
Bonsai		3.40	4.90			
Wolfpack		4.80	6.00			
LSD=0.05		0.80	0.70		(Scale: 1-9, 9=best)	
					(8/9/2007)	

U.S. DEPARTMENT OF AGRICULTURE  
AGRICULTURAL MARKETING SERVICEEXHIBIT E  
STATEMENT OF THE BASIS OF OWNERSHIP

Application is required in order to determine if a plant variety protection certificate is to be issued (7 U.S.C. 2421). The information is held confidential until the certificate is issued (7 U.S.C. 2426).

## 1. NAME OF APPLICANT(S)

ProSeeds Marketing, Inc.  
(BT: 12/19/2006)2. TEMPORARY DESIGNATION  
OR EXPERIMENTAL NUMBER  
MCN

## 3. VARIETY NAME

Five Point

## 4. ADDRESS (Street and No., or R.F.D. No., City, State, and ZIP, and Country)

13963 Westside Lane S.  
Jefferson, OR 97352

## 5. TELEPHONE (Include area code)

(541) 451-1847

## 6. FAX (Include area code)

(541) 451-1847

## 7. PVPO NUMBER

(BT: 10/1/2007)

#200400226

## 8. Does the applicant own all rights to the variety? Mark an "X" in the appropriate block. If no, please explain.



YES



NO

licensed from Rutgers, assignment attached

## 9. Is the applicant (individual or company) a U.S. national or a U.S. based company? If no, give name of country.



YES



NO

## 10. Is the applicant the original owner?



YES



NO

If no, please answer one of the following:

## a. If the original rights to variety were owned by individual(s), is (are) the original owner(s) a U.S. National(s)?



YES



NO

If no, give name of country

## b. If the original rights to variety were owned by a company(ies), is (are) the original owner(s) a U.S. based company?



YES



NO

If no, give name of country

## 11. Additional explanation on ownership (Trace ownership from original breeder to current owner. Use the reverse for extra space if needed):

Assembling of germplasm by Rutgers Univ. with license to Lofts Seed Inc for breeding; Lofts sold to ABT, ABT bankruptcy court sold to SOB group, with final parceling of license to MCN to ProSeeds Marketing for final production and marketing.

(BT: 12/19/2006 per applicant's authorization)

## PLEASE NOTE:

Plant variety protection can only be afforded to the owners (not licensees) who meet the following criteria:

1. If the rights to the variety are owned by the original breeder, that person must be a U.S. national, national of a UPOV member country, or national of a country which affords similar protection to nationals of the U.S. for the same genus and species.
2. If the rights to the variety are owned by the company which employed the original breeder(s), the company must be U.S. based, owned by nationals of a UPOV member country, or owned by nationals of a country which affords similar protection to nationals of the U.S. for the same genus and species.
3. If the applicant is an owner who is not the original owner, both the original owner and the applicant must meet one of the above criteria.

The original breeder/owner may be the individual or company who directed the final breeding. See Section 41(a)(2) of the Plant Variety Protection Act for definitions.

According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0581-0055. The time required to complete this information collection is estimated to average 0.1 hour per response, including the time for reviewing the instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, sexual orientation, marital or family status, political beliefs, parental status, or protected genetic information. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

#200400226

ASSIGNMENT OF FIVE POINT (MCN) TALL FESCUE

WHEREAS, Virginia Lehman, Blue Moon Farm, 811 Mountain River Drive, Lebanon, OR 97355; William A. Meyer, 137 Bucks Mill Road, Colts Neck, NJ 07722; Bruce B. Clarke, 93 Trieste Street, Iselin, NJ 08830; Barbara Fitzgerald, 5 South Edward Street, Sayreville, NJ 08872; and C. Reed Funk, Jr., 4 Delaware Drive, East Brunswick, NJ 08816 have cooperated in the breeding and development of Five Point (MCN) tall fescue.

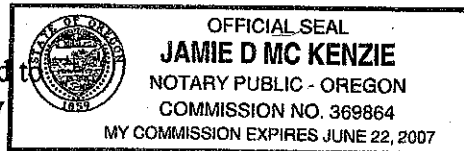
NOW, THEREFORE, IN CONSIDERATION OF ONE DOLLAR (\$1.00) and other valuable considerations made to each of us, and ONE DOLLAR (\$1.00) and other valuable consideration made to the New Jersey Agricultural Experiment Station, including those made in the Agreement dated Feb. 19, 1997 between the New Jersey Agricultural Experiment Station and Pro Seeds Marketing, Inc. (formerly Lofts Seed Inc., P.O. Box 26223, Winston-Salem, North Carolina 27114), we hereby assign unto said Pro Seeds Marketing, Inc., 13963 Westside Lane S. Jefferson, OR 97352; our entire interest in Five Point (MCN) tall fescue for the United States and all foreign countries and any plant variety protection to be issued therefore in the United States or any foreign country. The commissioner, Plant Variety Protection Office is requested to issue the plant variety protection certificate in accordance herewith.

Virginia Lehman  
Virginia Lehman

Sworn and subscribed to  
before me this 11<sup>th</sup> day

of May, 2004.

Jamie D McKenzie  
Notary Public of Oregon



William A. Meyer  
William A. Meyer

Sworn and subscribed to  
before me this 7<sup>th</sup> day

of May, 2004.

Francine C. Laanui  
Notary Public of New Jersey

FRANCINE C. LAANUI  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 11/29/2004

Bruce B. Clarke  
Bruce B. Clarke

Sworn and subscribed to  
before me this 7<sup>th</sup> day

of May, 2004.

Francine C. Laanui  
Notary Public of New Jersey

FRANCINE C. LAANUI  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 11/29/2004

C. Reed Funk, Jr.  
C. Reed Funk, Jr.

Sworn and subscribed to  
before me this 7<sup>th</sup> day

of May, 2004.

Francine C. Laanui  
Notary Public of New Jersey

FRANCINE C. LAANUI  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 11/29/2004

#200400226

Barbara Fitzgerald  
Barbara Fitzgerald

Sworn and subscribed to  
before me this 7<sup>th</sup> day

of May, 2004.

Francine C. Laanui  
Notary Public of New Jersey

FRANCINE C. LAANUI  
NOTARY PUBLIC OF NEW JERSEY  
Commission Expires 11/29/2004